 IN THE CLAIMS:

Please find below a listing of all pending claims. The statuses of the claims are set forth in parentheses. For those currently amended claims, <u>underlined</u> emphasis indicates insertions and ~~strikethrough~~ emphasis (and/or double brackets) indicates deletions.

1. (currently amended) A popularity degree calculation method for calculating a popularity degree indicating the height of a popularity of a document in a network via an apparatus connected with the network, the method comprising:

extracting documents updated or newly collected during a first time period;

calculating a popularity degree of each of the extracted documents during the first time period;

extracting a popularity degree from the calculated popularity degree during a second time period;

calculating a popularity transition degree indicating <u>how the popularity degree of each of the documents varies as time elapses by </u>both a direction and a degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period~~, to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order~~; and

outputting the popularity transition degree.

2. (original)   The popularity degree calculation method according to claim 1, wherein the popularity degree is calculated based on both a link relation of each of the extracted documents and document location information indicating a location in the network of each of the documents.

3. (original)   The popularity degree calculation method according to claim 2, wherein the popularity degree is calculated based on features of a character string

describing the document location information.

4-5. (previously cancelled)

6. (previously presented) The popularity degree calculation method according to claim 1, further comprising:

    calculating a regression equation against a time of the popularity degree calculated during the second time period,

    wherein the popularity transition degree is calculated according to the regression equation.

7. (original) The popularity degree calculation method according to claim 6, wherein the popularity transition degree is calculated based on a regression coefficient of the regression equation.

8. (original) The popularity degree calculation method according to claim 7, further comprising:

    determining transition tendency against the time of the popularity degree, based on an intercept of the regression equation.

9. (previously presented) The popularity degree calculation method according to claim 1, further comprising:

    determining a popularity degree order of each document in the extracted documents by ranking each of the extracted documents based on the popularity degree calculated during the second time period; and

    calculating a regression equation against a time of the popularity degree order during the second time period,

    wherein the popularity transition degree is calculated based on the regression equation.

10-21. (previously cancelled)

22. (currently amended) A service type judgment method for judging a type of a service provided by a document in a network via an apparatus connected with the network, the method comprising:

extracting documents updated or newly collected during a first time period;

calculating a popularity degree for each of the extracted documents updated or newly collected during the first time period;

extracting a popularity degree from the calculated popularity degree during a second time period;

calculating a popularity transition degree indicating <u>how the popularity degree of each of the documents varies as time elapses by</u> both a direction and a degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period, ~~to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order~~;

extracting a tag that is contained in each of the extracted documents and designates user input;

judging the type of the service provided by each of the documents, based on the tag that designates user input; and

outputting the popularity transition degree.

23. (original) The service type judgment method according to claim 22, further comprising:

determining that the document provides no service, if the document includes no tag designating user input.

24. (original) The service type judgment method according to claim 22, wherein

the service type provided by the document is judged based on the description of a button included in the document.

25. (original)   The service type judgment method according to claim 22, wherein the service type provided by the document is judged based on a user input area included in the document.

26. (currently amended) A computer-readable storage medium that stores a program for enabling a computer to calculate a popularity degree indicating the height of a popularity of a document in a network, the process comprising:

extracting documents updated or newly collected from a network during a first time period;

calculating a popularity degree for one of the extracted documents from the network updated or newly collected during the first time period;

extracting a popularity degree from the calculated popularity degree during a second time period;

calculating a popularity transition degree indicating <u>how the popularity degree of each of the documents varies as time elapses by</u> both a direction and a degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period, ~~to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order~~; and

outputting the popularity transition degree.

27. (previously cancelled)

28. (previously presented) The storage medium that stores a program for enabling the computer to execute a process according to claim 26, the process further comprising:

calculating a regression equation against the time of the popularity degree calculated during the second time period; and

calculating the popularity transition degree for indicating both a direction and a degree of transition of the popularity degree of the document, based on the regression equation.

29. (original) The storage medium that stores a program for enabling the computer to execute a process according to claim 28, wherein the popularity transition degree is determined based on a regression coefficient of the regression equation.

30. (original) The storage medium that stores a program for enabling the computer to execute a process according to claim 28, further comprising:

determining a tendency of transition against the time of the popularity degree, based on the regression equation.

31-32. (previously cancelled)

33. (currently amended) A document retrieval method for searching for a document in a network via an apparatus connected with the network, the method comprising:

collecting documents from the network;

extracting documents updated or newly collected from the network during a first time period;

calculating a popularity degree indicating the height of a popularity of each of the documents extracted from the network during the first time period;

extracting a popularity degree from the calculated popularity degree during a second time period;

calculating a popularity transition degree indicating how the popularity degree of each of the documents varies as time elapses by both a direction and a

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degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period~~, to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order~~;

retrieving the document meeting retrieval conditions from the collected documents, based on the retrieval conditions;

ranking the retrieved documents, based on the popularity degree; and

outputting information about the retrieved documents, based on the ranking result.

34. (previously presented) The document retrieval method according to claim 33, further comprising:

adding information about the popularity transition degree to information about the retrieved documents.

35-36. (previously cancelled)

37. (original) The document retrieval method according to claim 33, further comprising:

extracting a tag designating user input from the document;

judging a type of a service provided by the document, based on the tag designating user input; and

adding the information about the service type to the information about the retrieved documents.

38. (previously presented) The document retrieval method according to claim 33, further comprising:

receiving from a user registration of both document location information indicating location in the network of a specific document and a value; and

notifying the user of the fact that a popularity degree has reached the value, when the popularity degree for the document specified by the document location information has reached the value.

39. (currently amended) A document retrieval apparatus for searching for a document in a network via an apparatus connected with the network, comprising:

a processor; and

a memory storing computer-readable instructions, execution of the instructions by the processor configuring the system to include,

a collection unit ~~collecting~~ to collect documents from the network;

a popularity degree calculation unit ~~extracting~~ to extract documents updated or newly collected during a first time period as calculation targets of a popularity degree indicating the height of a popularity and calculating a popularity degree of each of the extracted documents updated or newly collected during the first time period, ~~extracting~~ to extract a popularity degree from the calculated popularity degree during a second time period, and ~~calculating~~ to calculate a popularity transition degree indicating how the popularity degree of each of the documents varies as time elapses by both a direction and a degree of transition of the popularity degree for each of the extracted documents based on the popularity degree during the first time period and the second time period, ~~to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order~~; and

a retrieval service unit ~~retrieving~~ to retrieve a document meeting retrieval conditions from the collected documents, based on the retrieval conditions, ranking the retrieved documents, based on the popularity degree and outputting information about the retrieved documents, based on the ranking result.

40-53. (previously cancelled)

54. (previously presented) A document retrieval method for searching for a document in a network via an apparatus connected with the network, the method comprising:

      collecting documents from a network;

      extracting documents updated or newly collected during a first time period;

      calculating a popularity degree indicating <u>how the popularity degree of each of the documents varies as time elapses by</u> the height of a popularity of each of the extracted documents during the first time period and extracting a popularity degree from the calculated popularity degree during a second time period~~, to thereby obtain a difference indicating how the popularity degree of each of the documents changes in a time series order~~;

      retrieving the document meeting retrieval conditions from the collected documents, based on the retrieval conditions;

      ranking the retrieved documents, based on the popularity degree;

      outputting information about the retrieved documents, based on the ranking result;

      receiving from a user registration of both document location information indicating location in the network of a specific document and a value; and

      notifying the user of the fact that a popularity degree has reached the value, when the popularity degree for the document specified by the document location information has reached the value.